

REMARKS

The present Amendment amends claims 1-4, 6 and 7-13. Therefore, the present application has pending claims 1-13.

Claim 3 stands objected to under 37 CFR §1.75(c) of being of improper dependent form for failing to further limit the subject matter of a previous claim. Amendments were made to claim 3 so as to further limit the subject matter of the prior claim. Therefore, this objection is overcome and should be withdrawn.

Claim 12 stands rejected to under 35 USC §112, first paragraph as allegedly failing to comply with the enablement requirement. Specifically, the Examiner alleges that the specification does not disclose the subject matter as recited in the claims regarding the discarding when an error is not found in the route during the route verification. Amendments were made to claim 12 to clarify the features of the present invention, for example, as illustrated in Fig. 18 of the present application. Particularly, amendments were made to the claims to more clearly recite that when a route is changed a check is performed so as to determine whether the changed route is correct. These features are now more clearly recited in claim 12. Therefore, the subject matter of claim 12 as described in the specification, for example, in the passages corresponding to Fig. 18, would sufficiently enable one of ordinary skill in the art to make and/or use the invention. Therefore, this rejection is overcome and should be withdrawn.

Claims 1-13 rejected under 35 USC §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as their invention. Various amendments

were made throughout claims 1-13 to bring them into conformity with the requirements of 35 USC §112, second paragraph. Therefore, Applicants submit that this rejection is overcome and should be withdrawn.

Specifically, amendments were made throughout claims 1-13 to correct the informalities noted by the Examiner in paragraph 4 of the Office Action. The Examiner's cooperation is respectfully requested to contact Applicants' Attorney by telephone should any further indefinite matter be discovered so that appropriate amendments may be made.

Claims 1-8 and 13 stand rejected under 35 USC §102(e) as being anticipated by Nagasawa (U.S. Patent Application Publication No. 2003/0145169). This rejection is traversed for the following reasons. Applicants submit that the features of the present invention as now more clearly recited in claims 1-8 and 13 are not taught or suggested by Nagasawa whether taken individually or in combination with any of the other references of record. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to claim 1 from which claims 2-8 depend and claim 13 to more clearly recite that the present invention is directed to a method of migrating data from an old storage subsystem to a new subsystem in a data processing system which includes a plurality of host computers and a plurality of storage subsystems. According to the present invention the method includes conducting a route changing phase before migration of the data from the old storage subsystem to the new storage subsystem, in the route changing phase sequentially changing an indication of access destination storage subsystems in the host computers such that the indication

of the access destination storage subsystem of a first host computer is changed from the old storage subsystem to the new storage subsystem and then the indication of the access destination storage subsystem of a second host computer is changed after the access destination storage subsystem of the first host computer has been changed, thereby permitting each host computer to access both the old and new storage subsystems, and in the route changing phase, by the new storage subsystem, reading data from the old storage subsystem in response to a read request from a host computer, sending the data to the host computer and writing data into the old storage subsystem in response to a write request from a host computer.

The present invention is intended to account for a situation where data maybe inconsistent between an old storage subsystem and a new storage subsystem such as that illustrated during the route changing phase in Fig. 4c of the present application. In this phase, as is clear the host computers can access either of the old storage subsystem and the new storage subsystem. However, according to the present invention in order to maintain consistency in the data between the old storage subsystem and the new storage subsystem write processing is conducted of updated data between the old storage subsystem and the new storage subsystem.

The above described features of the present invention as now more clearly recited in claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, these features of the present invention are not taught or suggested by Nagasawa.

Nagasawa teaches a storage subsystem replacement method wherein a storage control device provided in a first storage subsystem controls reading or writing data to or from a higher level device to or from the storage control device and to allow the storage control device to be connected to another storage control device so as to transfer data to the other storage device.

Particularly, Nagasawa illustrates in Fig. 10 thereof a system wherein host computers 10a and 10b are allowed to access only the new disk volume 12 through new disk controller 11 or the old disk volume 14 through the old disk controller 13 by use of the switch 15. Migration of data as per Nagasawa is conducted via the third access path 30, 31. In Nagasawa the new disk controller unit 11 performs all processing necessary to obtain data from the old disk controller 13.

Thus, at no point is there any teaching or suggestion in Nagasawa which addresses the problem to which the present invention is intended to solve wherein the host computers are all permitted to access either the new storage subsystem or the old storage subsystem during the route changing phase, whereby inconsistency in data can occur due to the Host computers accessing both of the storage subsystems.

Further at no point is there any teaching or suggestion in Nagasawa wherein processes are performed between the old and new storage subsystems to account/correct possible inconsistencies that can be introduced to the data when the host computers having access to both the old and new storage subsystems as in the present invention.

The present invention as recited in the claims is clearly directed to providing a method whereby consistency between the data stored in the old

and new storage subsystems is maintained. Such is not the intended objective of the system taught by Nagasawa since at no point does Nagasawa allow the host computers to access both the old and new storage subsystems in the route changing phase as in the present invention. In Nagasawa, both host computers 10a and 10b either access the new storage subsystem 11 or the old storage subsystem 13 never both. Accessing both the new storage subsystem 11 and the old storage subsystem 13 via the switch 15 is not possible in Nagasawa.

Thus, Nagasawa fails to teach or suggest in said route-changing phase, sequentially changing an indication of access destination storage subsystems in said host computers such that an indication of the access destination storage subsystem of a first host computer is changed from said old storage subsystem to said new storage subsystem and then an indication of the access destination storage subsystem of a second host computer is changed from said old storage subsystem to said new storage subsystem after the access destination storage subsystem of the first host computer has been changed, thereby permitting each host computer to access both the old and new storage subsystems as recited in the claims.

Further, Nagasawa fails to teach or suggest that in said route changing phase, by said new storage subsystem, reading data from said old storage subsystem in response to a read request from a host computer, sending the data to said host computer, and writing data into said old storage subsystem in response to a write request from a host computer as recited in the claims.

Therefore, Nagasawa fails to teach or suggest the features of the present invention as now more clearly recited in the claims. Accordingly,

reconsideration and withdrawal of the 35 USC §102(e) rejection of claimm 1-8 and 13 as being anticipated by Nagasawa is respectfully requested.

Applicants note that the Examiner did reject claims 9-12 based upon prior art. Claims 9-12 were amended to be in independent form including all the limitations of the base claim and any intervening claims. Accordingly, claims 9-12 are now in condition for allowance and an indication that such claims are allowed is respectfully requested since.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the reference utilized in the rejection of claims 1-8 and 13.

In view of the foregoing amendments and remarks, applicants submit that claims 1-13 are in condition for allowance. Accordingly, early allowance of claims 1-13 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (1213.43573X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Carl I. Brundidge
Registration No. 29,621

CIB/jdc
(703) 684-1120